



PubMed Nucleotide Protein Genome Structure PopSet Taxonomy OMIM

Search PubMed for

Entrez
PubMed

1: Eur J Immunol 1994 Jan;24(1):277-80

[Related Articles](#), [Books](#), [LinkOut](#)

Involvement of gp130/interleukin-6 receptor transducing component in interleukin-11 receptor.

PubMed
Services

Fourcin M, Chevalier S, Lebrun JJ, Kelly P, Pouplard A, Wijdenes J, Gascan H.

INSERM U 298, Laboratoire de biologie cellulaire, CHRU Angers, France.

Related
Resources

The recently cloned interleukin (IL)-11 displays many biological properties in common with those reported for IL-6. In order to analyze the nature and the functionality of the IL-11 receptor we developed a proliferative assay using the human multifactor-dependent cell line TF1. We showed that a blocking monoclonal antibody GPX7 raised against the gp130/IL-6 receptor transducing subunit was also able to inhibit the IL-11-triggered TF1 line proliferation. In addition, involvement of gp130 in IL-11 signaling was demonstrated by an induction of the transducing protein phosphorylation in response to IL-11, as observed for IL-6. In contrast, the blocking monoclonal antibody B-R6, which recognized the gp80/IL-6 binding subunit failed to interfere with the IL-11 proliferative signal in the TF1 cell line. Similarly, we did not observe any competition between IL-6 and IL-11 for a putative common binding site on the cell surface. These results suggest that the IL-11 binding component is different from the gp80/IL-6 receptor. In conclusion, IL-11, along with IL-6, leukemia inhibitory factor, oncostatin M and ciliary neurotrophic factor, belongs to the same family of cytokines, using gp130 as a transducing protein.

PMID: 8020567 [PubMed - indexed for MEDLINE]

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

[Department of Health & Human Services](#)

[Freedom of Information Act](#) | [Disclaimer](#)